

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION	NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,894		10/30/2003	J. Claude Caci	T3497-8770US01	7809
118	7590	08/23/2005		EXAMINER	
		CTRIC CO	EWART, JAMES D		
PATENT DEPARTMENT STATION 2826 8000 WEST FLORISSANT			2826	ART UNIT PAPER NUMBER	
	ST. LOUIS, MO 63136			2683	
				DATE MAIL ED: 08/23/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/695,894	CACI, J. CLAUDE					
Office Action Summary	Examiner	Art Unit					
	James D. Ewart	2683					
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the o	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tirely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed /s will be considered timely. In the mailing date of this communication. In (35 U.S.C. § 133).					
Status	•						
1) Responsive to communication(s) filed on							
2a) This action is FINAL . 2b) ⊠ Thi	s action is non-final.						
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is						
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.					
Disposition of Claims							
4) Claim(s) 1-17 is/are pending in the application	٦.						
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-6</u> is/are rejected.	Claim(s) <u>1-6</u> is/are rejected.						
	,						
8) Claim(s) 7-17 are subject to restriction and/or	election requirement.	·					
Application Papers							
9)☐ The specification is objected to by the Examin	er.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119		•					
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documen 2. ☐ Certified copies of the priority documen 3. ☐ Copies of the certified copies of the priority documen	ts have been received. ts have been received in Applicati	on No					
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list		ed.					
Attachment(s)							
1) X Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∭ Interview Summary Paper No(s)/Mail Da						
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10-30-2003.		Patent Application (PTO-152)					

Art Unit: 2683

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121 and 372:

I. Claims 1-6 are, drawn to sending a chirp-on-demand signal to a mobile station,

classified in class 455, subclass 456.2.

II. Claims 7-17 are, drawn to communication between two base stations, classified in

class 455, subclass 561.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions [I] and [II] are related as combination and subcombination. Inventions in this

relationship are distinct if it can be shown that (1) the combination as claimed does not require

the particulars of the subcombination as claimed for patentability, and (2) that the

subcombination has utility by itself or in other combinations (MPEP 806.05(c)). In the instant

case, the combination as claimed does not require the particulars of the subcombination as

claimed because the sending of a chirp-on-demand signal doesn't require a calibrated

transmission line between two base stations. The subcombination has separate utility such as a

wireless unit with memory/browser arrangement for wireless internet application.

3. Because these inventions are distinct for the reasons given above and have acquired a

separate status in the art because of their recognized divergent subject matter, restriction for

examination purposes as indicated is proper.

4. During a phone conversation with the Examiner on 08-10-2005 the Applicant, James

2

Art Unit: 2683

Carmicheal, elected to have group 1 examined.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-3 are rejected under 35 USC 103(a) as being unpatentable over Forssen et al. (U.S. Patent No. 6,031,490) in view of Cahn et al (U.S. Patent No. 5,535,278).

Referring to claim 1, Forssen et al teaches a wireless radio communications system that includes at least one communications tower and a mobile unit configured to transmit a chirp-on-demand signal (Column 4, Lines 40-45 and Figure 5; 507), the system comprising: a base station configured to issue a wireless command to the mobile unit (Figure 6 and Column 10, Lines 52-53), the wireless command instructing the mobile unit to transmit a chirp-on-demand signal (Figure 5; 507 & Column 4, Lines 40-43); and a location receiver operatively connected to the at

Art Unit: 2683

least one communication tower configured to receive the chirp-on-demand signal from the mobile unit for determining a location calculation of the mobile unit (Figures 1 & 2 and Column 4, Lines 45-46 and Column 9, Lines 43-46), but does not teach and decoding the signal. Cahn et al. teaches decoding a signal (Column 2, Lines 28-30 and Column 6, Lines 43-55). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Forssen et al. with the teaching of Cahn et al. of decoding a signal to compute the range of the transmitter (Column 2, Lines 30-32).

Referring to claim 2, Forssen et al. teaches a mobile base station for emergencies (Column 12, Line 7), chirp-on-demand (Column 4, Lines 41-44) and location receiver (Column 4, Lines 45-46), but does not teach decoding a signal that is based on a pattern of frequency, amplitude, and timing. Cahn et al. teaches decoding a signal that is based on a pattern of frequency, amplitude, and timing (Column 2, Lines 28-30 and Column 6, Lines 43-55). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Forssen et al. with the teaching of Fisch et al. of decoding a signal that is based on a pattern of frequency, amplitude, and timing to to compute the range of the transmitter (Column 2, Lines 30-32).

Referring to claim 3, Forssen et al further teaches wherein the mobile unit is a cellular telephone (Figure 6;108).

Art Unit: 2683

7. Claims 4-6 are rejected under 35 USC 103(a) as being unpatentable over Forssen et al. in view of Friedman (U.S. Patent No. 4,888,595).

Referring to claim 4, Forssen et al teaches a geographically locatable cellular telephone having chirp-on-demand capabilities (Column 4, Lines 40-45 and Figure 5; 507), the geographically locatable cellular telephone (Column 3, Lines 34-41) comprising: a chirp-ondemand instruction receiver integrated in the geographically locatable cellular telephone (Column 10, Lines 62-64), the chirp-on-demand instruction receiver configured to receive and interpret a chirp-on-demand instruction signal transmitted wirelessly from a cellular communications tower (Figure 1, Figure 5, 507 and Column 4, Lines 40-45) to the locatable cellular telephone during a pre-established call requiring geographic location services (Column 12, Lines 6-8) associated with a geographic location of the cellular telephone for the purpose of geographically locating the locatable cellular telephone (Column 4, Lines 55-57); and a transmission modulator integrated in the geographically locatable cellular telephone (Figure 1; 105), but does not teach the transmission modulator configured to modulate in a pattern the frequency, amplitude, and timing of a wireless radio frequency signal emanating from the geographically locatable cellular telephone, the pattern being pre-selected to provide a recognizable signal useful in geographically locating the cellular telephone. Friedman teaches the transmission modulator configured to modulate in a pattern the frequency, amplitude, and timing of a wireless radio frequency signal emanating from the geographically locatable cellular telephone (Column 2, Lines 50-63), the pattern being pre-selected to provide a recognizable signal useful in geographically locating the cellular telephone (Column 4, Lines 65-68).

Art Unit: 2683

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Forssen et al with the teaching of Friedman wherein the transmission modulator configured to modulate in a pattern the frequency, amplitude, and timing of a wireless radio frequency signal emanating from the geographically locatable cellular telephone, the pattern being pre-selected to provide a recognizable signal useful in geographically locating the cellular telephone to provide an emergency transmitter in which the signal transmitted identifies the specific vehicle in distress (Column 2, line 1-3).

Referring to claim 5, Forssen et al further teaches wherein the pre-established call is transmitted on a channel separate from the wireless radio frequency signal used to provide a chirp-on-demand signal (Figure 5, 503,505 and 507). If the MS is not using a digital channel during the phone call, the MS is required to send a signal on a digital channel.

Referring to claim 6, Forssen et al further teaches wherein the pre-established call is carried on the wireless radio frequency signal (Figure 1; 108).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chao et al. U.S. Patent No. 6,314,281 discloses method and apparatus for precisely locating a mobile unit.

Art Unit: 2683

Chen U.S. Patent No. 6,141,558 discloses method and apparatus for locating a subscriber unit in a communication system.

Chiang et al. U.S. Patent No. 6,741,863 method and apparatus for locating a wireless mobile unit.

Dunn et al. U.S. Patent No. 5,873,040 discloses wireless 911 emergency location.

Dupray U.S. Patent No. 6,249,252 discloses wireless location using multiple location estimators.

Karr et al. U.S. Patent Publication No. 2003/0222820 Wireless location using hybrid techniques.

Liu U.S. Patent Publication No. 2004/0029558 discloses method and system for determining a location of a wireless transmitting device and guiding the search for the same.

Sanderford et al. U.S. Patent No. 5,917,449 discloses enhanced position calculation.

Yamanaka et al. U.S. Patent No. 6,792,262 discloses mobile system and mobile management system.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Ewart whose telephone number is (571) 272-7864. The examiner can normally be reached on M-F 7am - 4pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571)272-7872. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Art Unit: 2683

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2600.

Ewart

August 17, 2005

WILLIAM TROST SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600